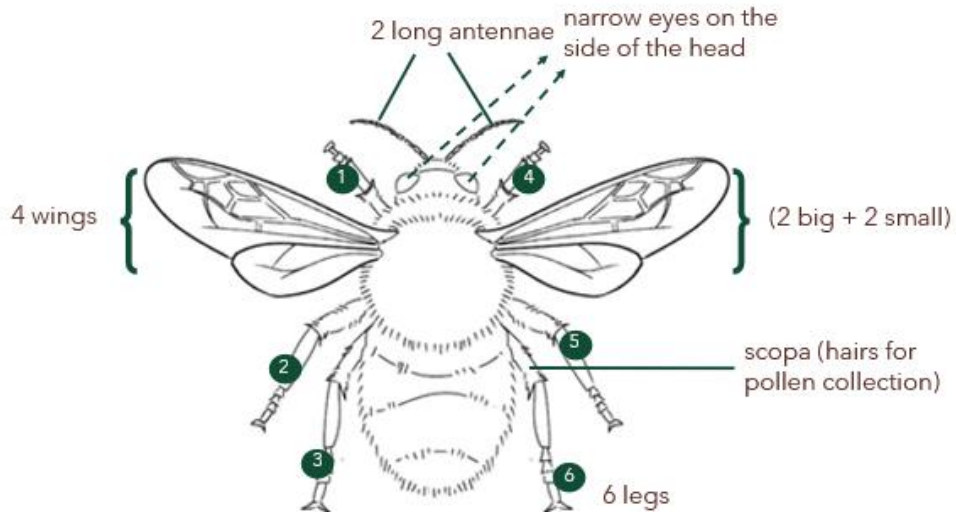


## 'Bee the Change: A Solitary Bee Workshop for All Ages' with Chloe

A bee is a **flying insect** that forages for pollen and nectar on flowers. Some people call bees 'vegetarian wasps' because they evolved from wasps and get their protein from pollen, rather than meat.

### Parts of a bee:



### To Bee or Not to Bee:

- Not a bee (it's a hoverfly)



- A bee (a green sweat bee)



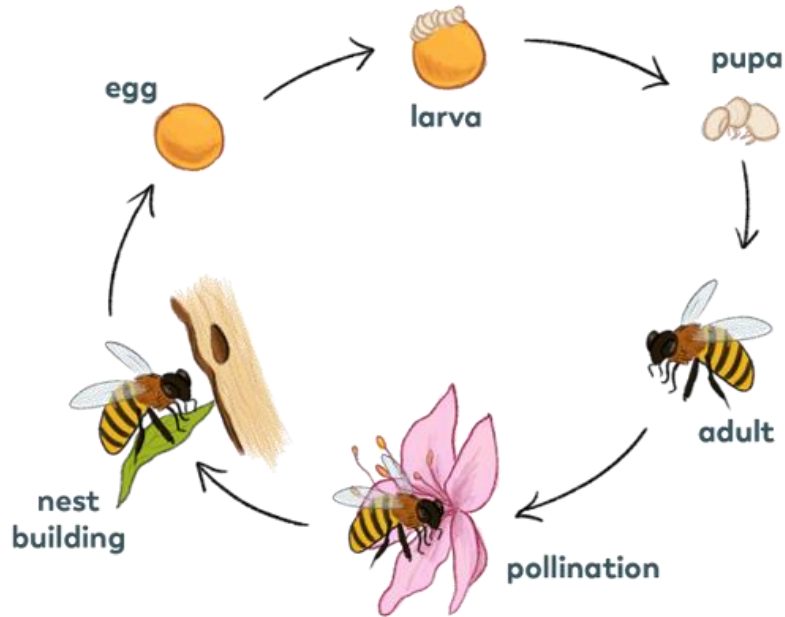
- Not a bee (it's a wasp)



### What is a solitary bee?

- Does not make honey, belong to a hive, or have a queen

- Lives in holes in the ground, in stems, or in other crevices
- The female bees collect pollen and nectar to feed their young
- Docile insects because they are not protecting others, only themselves



(IMG: Project Hero)

## Common Bees in Seattle (As defined by the Washington Native Bee Society)

### 1. Blue Orchard Bees (*Osmia lignaria*)



Joe DiIugo

- Active mid-March to early June
- Populate bee hotels
- Pollinate spring fruit trees

### 2. Western Leafcutter Bees (*Megachile perihirta*)



- Active June-September
- Ground-nesters (often in cracked pavement)
- Cut leaves to line their nests

### 3. Fairy Bees (*Perdita spp.*)



Joe Diago

- Active April-October
- Very tiny!

### 4. Metallic Green Sweat Bees (*Agapostemon virescens*)



Joe Diago

- Active May-November
- Nest in soil

### 5. Nomad Bees (*Nomada spp.*)





Joe Dilgo

- Active April-August
- Very little hair
- Come in many colors

### Why are bees in decline?

Solitary bees are facing a decline for a few important reasons. One big problem is that places where they live, like holes in the ground or hollow plant stems, are disappearing as cities grow and farms need more space. Also, some pesticides that people use to keep bugs away can make the bees sick and even stop them from having babies. These bees need food from flowers, but changes in how we use land and grow crops mean there are fewer flowers for them to eat from. The weather is changing too, and that can confuse the bees and the flowers they like. Lastly, not many people know how important these bees are, so we need to work together to protect them by giving them safe places to live, planting flowers they like, and telling others about their importance.

### How can we help bees?

- Planting flowers with accessible pollen and nectar resources, especially prior to overwintering
  - Fall perennials for bees
    - Black-Eyed Susan (*Rudbeckia*)
    - Russian Sage (*Perovskia atriplicifolia*)
    - Sage (*Salvia*)
    - Licorice Mint (*Agastache*)
    - Asters (*Aster*)
    - Coneflower (*Echinacea*)
    - Goldenrod (*Solidago*)
    - Japanese Anemone (*Anemone hupehensis*)
- Observing them & raising awareness
  - Learn to identify the bees in your garden or bee house
  - Upload observations to iNaturalist app
  - Tell others about your pollinator garden and the importance of bees!
- Refrain from using pesticides! Remember: if it hurts a mosquito, it also hurts a bee